the other, there was formed a long and loose ligament and the use of the limb was materially impaired.—*Beitrage zur klinischen Chirurgie Mittheilungen aus der chirurg. Klinik zu Tuebingen*, Bd. iii, hft 2.

FRED. KAMMERER (New York.)

II. The Treatment of Joint Inflammations by Irrigations and Injections. By DR. WILHELM HAGER, (Hamburg) The author describes the method of Rinne in various inflammatory joint affections, the method of tapping being by means of an ordinary trocar. The fluids preferred for injection after puncture are either 5% carbolic acid or corrosive sublimate 1 in 1000, the latter being especially effective in the hands of Schede (Hamburg) in the treatment of purulent, infectious or metastatic joint affections.

The method employed in all cases consisted in first relieving the joint of its exudate by means of trocar and canula, the above fluids being subsequently injected. One hundred cases of simple hydrops genu are recorded operated upon in cases from one week to ten years duration; carbolic 5% used; recovery in all cases except a case of tuberculosis of the lungs; no relapses observed.

Nine cases of hæmarthros. genu were punctured and washed out. Of eight cases of acute primary suppuration of the knee or elbow joint four were discharged cured, two being discharged by request in splint, and one case died of delirium tremens. Here incision and drainage became necessary.

In secondary so-called metastatic inflammations of the joints the results are not so favorable as in simple synovitis; in recent cases a good result may be obtained. Where a periarticular abscess has compromised the joint capsule and caused panarthritis, incision and drainage give the only chance of recovery. The result of irrigation with 3% or 5% carbolic was favorable also in four cases of acute suppurative arthritis, following the acute infectious diseases. Nine cases of gonorrhœal inflammation of the joints in which the exudate was either serous or purulent, were treated by irrigation. In five the result obtained was almost a complete normal movement of the joint. In four cases the joint motion was normal after operation. In several cases of the periarticular inflammatory form of gonorrhœal affection the results

were less satisfactory. Those cases where ankylosis was threatened the author thinks were benefited by the above treatment. Twelve cases of simple joint exudate remaining after acute articular rheumatism were treated by irrigation (3% carbolic). In these cases the knee was the seat of the disease 13 times, the elbow once, giving a total 14. In nine patients a good result was obtained, and in three almost normal joint motion resulted. The main obstacle in these cases is the periarticular tissue-infiltration which necessitates subsequent massage etc. In purulent exudates after polyarthritis rheumatica (3 cases) the results were favorable, though here we have to contend with a form of joint affection destructive to the cartilages in its tendencies. In none of the cases recorded, however, did the author incise or drain. The results of this mode of treatment were found favorable in synovial suppuration following osteomyelitis of the epiphysis. In syphilitic joint disease the results were encouraging. In 30 cases of tubercular joints the joint-irrigations gave favorable results; improvement in 14 cases. Hueter's injections were used in 14 cases. *Zeitschrift f. Chir.*, Bd. xxvii, heft 1 and 2.

III. Contributions to the Resection and Osteotomy of Ankylosed Joints. By TH. KOLLIKER. (1) In cases of tuberculous coxitis, the author operates with Langenbeck's posterior incision: the trochanter is exposed with the raspatorium and resection knife. The acetabulum should be laid bare and thus any latent processes, osteomyelitis or tuberculosis may be exposed. If tuberculous coxitis exist the cavity of the wound after operation is best filled with iodoform or sublimate gauze. If the diseased process in the bone has long ceased then the continuous suture and drainage are indicated. The after treatment consists in extension for three to six weeks. The patient should carry an extension splint for a year. In bony ankylosis the resection with the chisel is indicated. (Volkmann).

(2) In ankylosis at the knee joint (faulty position) the joint is best exposed by a curved incision beneath the patella. After division of the ligamentum patellæ proprium, a flap including the patella is formed and reflected upward, and the condyles of the femur are sawn through